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(71) Anmelder (für alle Bestimmungsstagten ausser US): SIEMENS AKTIENGESELLSCHAFT [DE/DE]; Wittelsbacherplatz 2, D-80333 München (DE).

(72) Erfinder; und

(75) Erfinder/Anmelder (nur für US): BAUMGAERTEL, Ulrich [DE/DE]; Riensbergstrasse 51, D-13599 Berlin (DE). ROEHL, Wolfgang [DE/DE]; Im Rehgrund 43a, D-13503 Berlin (DE), FRANKE, Henry (DE/DE); Granitzstrasse 47, D-13189 Berlin (DE), HOCHGRAEF, Holger [DE/DE]; Dorfstrasse 18, D-16845 Ganzer (DE).

SIEMENS AKTIENGE-74) Gemeinsamer Vertreter: SELLSCHAFT; Postfach 22 16 34, D-80506 München

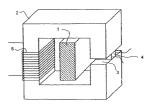
(DE)

(54) Title: METHOD FOR REPRODUCING DIRECT CURRENTS AND DIRECT CURRENT TRANSFORMERS FOR CARRYING OUT SAID METHOD

(54) Bezeichnung: VERFAHREN ZUR ABBILDUNG VON GLEICHSTRÖMEN UND GLEICHSTROMWANDLER ZUR DURCHFÜHRUNG DES VERFAHRENS

(57) Abstract

The invention relates to a method for reproducing direct currents, for use notably in direct-current switchgear, and to a direct-current transformer for carrying out said method. In low-voltage switchgear, measurement of the primary direct current should be carried out if possible within the system, i.e. without a supply of external energy from an additional energy source providing an auxiliary voltage, or at least by using only a low-output energy source. According to the above method the current signal produced by a secondary winding, which via an iron core is coupled to a primary winding through which the current to be measured passes, is integrated and the integrated current value is transmitted to a measurement device or trigger circuit of a switchgear. The integrated current value is adjusted at defined intervals. To this end the primary current to be measured is determined by a compensation method using a magnetic field sensor for measuring the magnetic field in the iron core and the integrated current



value is corrected to this value. The above method requires only a fraction of the energy of known direct-current transformers because the compensation method used is carried out only at intervals to eliminate the drift of the current value determined using the integration method.